

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A valve timing adjusting apparatus comprising:

a first rotor rotating synchronously with a crank shaft of an internal combustion engine;

a second rotor fixed to the end face of an intake or exhaust camshaft thereof and relatively rotatably provided within the first rotor ~~by a predetermined angle;~~

a rotation regulating member provided within either the first rotor or the second rotor, regulating the relative rotation between the first rotor and the second rotor when the relative position between both the rotors has reached a predetermined position;

an engaging hole formed within either the first rotor or the second rotor, receiving therein the rotation regulating member when the relative rotation between both the rotors is regulated, and being closed after the regulation of the relative rotation between both the rotors is released; ~~and~~

a closing member that closes the engaging hole ~~so as to push the rotation regulating member from a first position in the engaging hole to a second position outside of the engaging hole; and~~

an oil passage which supplies hydraulic pressure for the closing member and is controlled separately from an oil passage which supplies hydraulic pressure for relatively rotating the first rotor and the second rotor.

2. (canceled).

3. (previously presented): The valve timing adjusting apparatus according to Claim 1, wherein the closing member slides in an axial direction of the engaging hole.

4. (previously presented): The valve timing adjusting apparatus according to Claim 1, wherein the closing member slides in a direction crossing the axial direction of the engaging hole.

5. (previously presented): The valve timing adjusting apparatus according to Claim 1, wherein the closing member is hydraulically slidable.

6. (currently amended): The valve timing adjusting apparatus according to Claim 5, wherein ~~an~~the oil passage supplying hydraulic pressure for the closing member is separately provided from ~~an~~the oil passage supplying hydraulic pressure for relatively rotating the first rotor and the second rotor such that the oil passage which supplies hydraulic pressure for the closing member is not influenced by fluctuations in the hydraulic pressure supplied for relatively rotating the first rotor and the second rotor.

7. (currently amended): The valve timing adjusting apparatus according to Claim ~~6~~1, wherein the oil passage supplying hydraulic pressure for the closing member comprises a valve controlling the supply and the stop of hydraulic pressure for operating the closing member.

8. (original) The valve timing adjusting apparatus according to Claim 5, wherein the closing member can release the regulation of the relative rotation between the first rotor and the second rotor even when the hydraulic pressure is the lowest when the internal combustion engine is running.

9. (original): The valve timing adjusting apparatus according to Claim 1, wherein the engaging hole is formed in the position between the most advanced position and the most lagged position, which is the relative position of the second rotor relative to the first rotor.

10. (currently amended): A valve timing adjusting apparatus comprising:
a first rotor rotating synchronously with a crank shaft of an internal combustion engine;
a second rotor fixed to the end face of an intake or exhaust camshaft thereof and relatively rotatably provided within the first rotor ~~by a predetermined angle~~;
a rotation regulating member provided within either the first rotor or the second rotor, regulating the relative rotation between the first rotor and the second rotor when the relative position between both the rotors has reached a predetermined position;

an engaging hole formed within either the first rotor or the second rotor, receiving therein the rotation regulating member when the relative rotation between both the rotors is regulated, and being closed after the regulation of the relative rotation between both the rotors is released; ~~and~~

a closing member that forces the rotation regulating member ~~from a first position in the engaging hole to a second position~~ out of the engaging hole to thereby release the engagement of the rotation regulating member, and closes the engaging hole; and

an oil passage which supplies hydraulic pressure for the closing member and is controlled separately from an oil passage which supplies hydraulic pressure for relatively rotating the first rotor and the second rotor.

11. (previously presented): A valve timing adjusting apparatus comprising:

a first rotor rotating synchronously with a crank shaft of an internal combustion engine;

a second rotor fixed to the end face of an intake or exhaust camshaft thereof and relatively rotatably provided within the first rotor by a predetermined angle;

a rotation regulating member provided within either the first rotor or the second rotor, regulating the relative rotation between the first rotor and the second rotor when the relative position between both the rotors reached a predetermined position;

an engaging hole formed within either the first rotor or the second rotor, receiving therein the rotation regulating member during the relative rotation between both the rotors is regulated, and being closed after the regulation of the relative rotation between both the rotors is released,

wherein the closing member slides in a direction crossing the axial direction of the engaging hole.

12. (previously presented): The valve timing adjusting apparatus according to Claim 1, wherein the closing member is in the form of a slider having a shoulder, such that movement of the slider is limited by the shoulder being abutted against an element surrounding the slider.

13. (previously presented): The valve timing adjusting apparatus according to Claim 12, wherein the element is a bushing.

14. (previously presented): The valve timing adjusting apparatus according to Claim 10, wherein the closing member is in the form of a slider having a shoulder, such that movement of the slider is limited by the shoulder being abutted against an element surrounding the slider.

15. (previously presented): The valve timing adjusting apparatus according to Claim 14, wherein the element is a bushing.

16. (previously presented): The valve timing adjusting apparatus according to Claim 1, wherein the rotation regulating member is a lock pin.

17. (previously presented): The valve timing adjusting apparatus according to Claim 10, wherein the rotation regulating member is a lock pin.

18. (currently amended): The valve timing adjusting apparatus according to Claim 1, wherein contact is maintained between the closing member and rotation regulating member ~~from the first position to the second position~~ when the closing member closes the engaging hole.

19. (currently amended): The valve timing adjusting apparatus according to Claim 10, wherein contact is maintained between the closing member and rotation regulating member ~~from the first position to the second position~~ when the closing member forces the rotation regulating member out of the engaging hole.